REMARKS

Claims 1 and 2 remain pending in this application and have been rejected under 35 U.S.C. 103(a) as obvious over Shinaga et al. (JP 2002/071286) in view of the skill of a person of ordinary skill in the art to optimize the product disclosed in Shinaga. In other words, the rejection characterizes the structure recited in the claims as simply the predictable result of applying a known technique to a known product.

MPEP §2143 states that when making a rejection of obviousness based on the rationale that the claim recitation is simply the predictable result of applying a known technique to a known product the Examiner must demonstrate that "[o]ne of ordinary skill in the art would have been capable of applying this known technique to a known device (method, or product) that was ready for improvement and the results would have been predictable to one of ordinary skill in the art." The MPEP further elaborates that "[i]f any of these findings cannot be made, then this rationale cannot be used to support a conclusion that the claim would have been obvious to one of ordinary skill in the art." Furthermore, "[a] particular parameter must first be recognized as a result-effective variable, i.e., a variable which achieves a recognized result, before the determination of the optimum or workable ranges of said variable might be characterized as routine experimentation." MPEP §2144.05(II)(B) *citing In re Antonie*, 559 F.2d 618, 195 USPQ 6 (CCPA 1977). The applicant respectfully

traverses the rejection because one of ordinary skill in the art would not have been capable of applying a known technique to a known product to obtain predictable results.

In order to conclude that optimization for brazing performance and workability is obvious, one would have to base such reasoning on improper hindsight. A rejection of obviousness cannot be based upon "knowledge gleaned only from applicant's disclosure." See MPEP §2145 *citing In re McLaughlin*, 443 F.2d 1392, 1395, 170 USPQ 209, 212 (CCPA 1971). Shinaga does not disclose any range for slit length, spacing between slits or ratio for slit length to spacing between slits. In Shinaga, there is no mention of slit length as a parameter in the construction of a flat tube heat exchanger and only an allusion to the spacing between slits being a "predetermined" length. The Office Action of August 13, 2007 admits that the only parameter even mentioned in Shinaga is the spacing between slits and not the slit length. *See* Office Action August 13, 2007 page 2. However, the cited reference only discloses that the spacing between slits is "predetermined." There is no rationale disclosed for the spacing between the slits and there are a myriad of possible reasons for specifying predetermined spacing between slits, such as ease of manufacturing. Shinaga does not even discuss issues of brazing performance or workability. One should be able to envision, that it could take a significant amount of time and experience with working on manufacturing the flat tube to even discover an issue

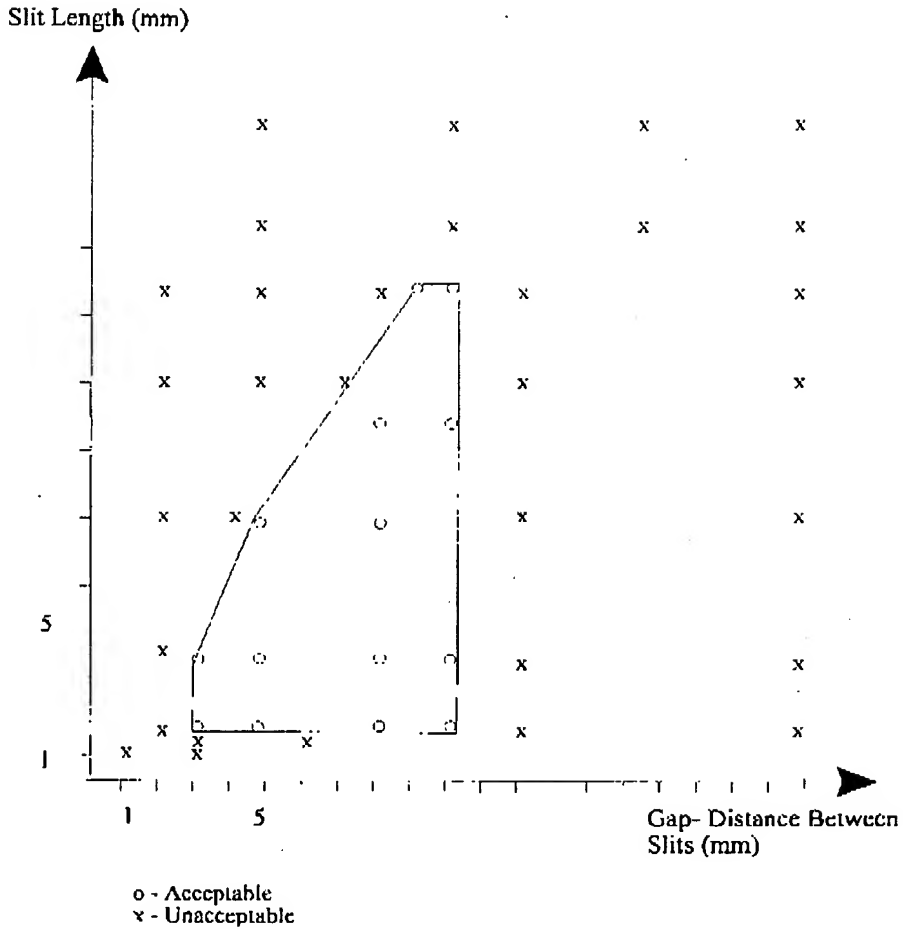
with brazing performance as the internal portion of the flat tube is not readily observable.

Furthermore, the inventor has stated he *discovered* the source of the problems regarding brazing performance and workability, i.e. slit length and distance between slits. *See* Specification page 2, 2nd full paragraph. This is further evidenced by the affidavit of Shincho Shuko, which states that when the present application was filed it was not known to him, one of skill in the applicable art, that slit length and layout would influence brazing reliability and workability. *See* Supplemental Response of June 26, 2007, Appendix- Rule 132 Affidavit of Shincho Shuko. Therefore, it is not obvious to optimize the slit length and distance between slits to improve both brazing performance and workability.

Applicant respectfully asserts that Mr. Shuko's affidavit is persuasive and should be weighed as evidence in applicant's favor even though the cited reference is from the same assignee as the present application. It is unfair to deprive an applicant from proffering evidence from the most persuasive source, one who asserts that he is the inventor of the cited reference, simply because he is an employee of the assignee of the present patent application. One should not be able to apply a higher standard of proof on an application merely because the application has a common assignee with the cited reference. Moreover, if "[a]n affidavit of an

applicant as to the advantages of his or her claimed invention, while less persuasive than that of a disinterested person, cannot be disregarded for this reason alone.," *a fortiori*, the affidavit of one who is not the applicant, but simply an employee of the common assignee should not be disregarded for this reason alone. *See* §716.01(c) *citing Ex parte Keyes*, 214 USPQ 579 (Bd. App. 1982); *In re McKenna*, 203 F.2d 717, 97 USPQ 348 (CCPA 1953). Thus, Mr. Shuko's persuasive affidavit should be weighed as evidence in applicant's favor.

In regard to brazing performance and workability, the Office Action of January 25, 2007 states that "[i]t would have been obvious to one of ordinary skill in the art .. to seek a balance between these conflicting goals." According to such reasoning, one skilled in the art would not expect a result where both goals of brazing performance and workability are acceptable. However, applicant has disclosed a critical range wherein brazing performance and workability do not conflict. Furthermore, applicant has demonstrated the criticality of the range, disclosing the results of numerous experiments with differing values for slit length and spacing between slits. In addition, if one looks at the graph below which is based upon the results of the experiments disclosed in the specification, there is no clear



trend upon which one skilled in the art could predict such a range for acceptable performance; even values very close to the range recited in the claims do not perform acceptably. Therefore, even if, *arguendo*, it was understood by those of ordinary skill in the art that in the extreme cases described by the Examiner that brazing performance or workability would be unacceptable it would not have been obvious

that there would be a range of values where both brazing performance or workability would be acceptable. Thus, the present application discloses a range of values for slit length and spacing between slits that display an unexpected property that is not obvious in light of the cited art.

In light of the foregoing, the application is now believed to be in proper form for allowance of all claims and notice to that effect is earnestly solicited.

No fee is believed due. If there is any fee due the USPTO is hereby authorized to charge such fee to Deposit Account No. 10-1250.

Respectfully submitted,
JORDAN AND HAMBURG LLP

By C. Bruce Hamburg by M. Zev Levoritz Reg. No. 50,151
C. Bruce Hamburg
Reg. No. 22,389
Attorney for Applicants

and,

By M. Zev Levoritz
M. Zev Levoritz
Reg. No. 50,151
Attorney for Applicants

Jordan and Hamburg LLP
122 East 42nd Street
New York, New York 10168
(212) 986-2340